

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A semiconductor container opening/closing apparatus, comprising:

a stage ~~for placing on~~ which to place a semiconductor container accommodating a semiconductor wafer;

a connection portion ~~for connecting to~~ connect an opening of said semiconductor container and an opening of a semiconductor manufacturing apparatus;

an opener ~~for holding to~~ hold a lid of said semiconductor container and then ~~opening to open~~ and ~~closing to close~~ said lid in a direction vertical to an opening surface of the container; and

an opener elevator mechanism ~~for moving to~~ move down the opener holding the lid of said semiconductor container so as to connect the opening of said semiconductor container and the opening of said semiconductor manufacturing apparatus while both of the openings are opened, or ~~for moving to~~ move up said opener so as to close the connection between said openings,

wherein an operating velocity of opening the container by the opener is set such that a velocity-differential pressure ratio obtained by dividing the maximum velocity at the time of opening the lid of said semiconductor container, by the

differential pressure between the inside pressure and the outside pressure of said semiconductor manufacturing apparatus, becomes 0.06 ((m/s) Pa) or less.

2. (Currently Amended) A semiconductor container opening/closing apparatus, comprising:

a stage ~~for placing on~~ which to place a semiconductor container accommodating a semiconductor wafer;

a connection portion ~~for connecting to~~ connect an opening of said semiconductor container and an opening of a semiconductor manufacturing apparatus;

an opener ~~for holding to~~ hold a lid of said semiconductor container and then ~~opening to open~~ and ~~closing to close~~ said lid in the direction vertical to an opening surface of the container;

an opener elevator mechanism ~~for moving to~~ move down the opener holding the lid of said semiconductor container so as to connect the opening of said semiconductor container and the opening of said semiconductor manufacturing apparatus while both of the openings are opened, or ~~for moving to~~ move up said opener so as to close the connection between said openings; and

a cover ~~for covering to~~ cover both said opener having moved down and said opener elevator mechanism, and

~~wherein~~ means for preventing particles generated by operation of the opener and opener elevator mechanism from being trapped in the cover, said means including an opening ~~is provided~~ at a lower end portion of said cover in the rear side of said semiconductor container opening/closing apparatus.

3. (Original) The semiconductor container opening/closing apparatus according to claim 2,

wherein an exhaust fan is provided at a lower end portion of said cover in the rear side of said semiconductor container opening/closing apparatus.

4. (Currently Amended) A semiconductor device manufacturing method, comprising the steps of:

accommodating a semiconductor wafer in a semiconductor container and conveying ~~between each~~ the semiconductor container to a semiconductor manufacturing apparatus;

connecting an opening of said semiconductor container and an opening of said semiconductor manufacturing apparatus;

connecting said openings such that a velocity differential pressure ratio obtained by dividing the maximum velocity at the time of vertically opening a held lid of said semiconductor container, by the differential pressure between the inside pressure and the outside pressure of said semiconductor manufacturing apparatus, is set to be 0.06 ((rn/s) Pa) or less; and

processing a semiconductor wafer accommodated in said semiconductor container.

5. (New) A semiconductor container opening/closing apparatus, comprising:

means for placing a semiconductor container accommodating a semiconductor wafer;

means for connecting an opening of said semiconductor container and an opening of a semiconductor manufacturing apparatus;

opening means for holding a lid of said semiconductor container and then opening and closing said lid in a direction vertical to an opening surface of the container;

elevator means for moving down the opening means holding the lid of said semiconductor container so as to connect the opening of said semiconductor container and the opening of said semiconductor manufacturing apparatus while both of the openings are opened, or for moving up said opening means so as to close the connection between said openings; and

means for preventing foreign particles from being drawn into said semiconductor container during opening of said lid, said means comprising means for setting an operating velocity of opening the container by the opener is set such that a velocity-differential pressure ratio obtained by dividing the maximum velocity at the time of opening the lid of said semiconductor container, by the differential pressure between the inside pressure and the outside pressure of said semiconductor manufacturing apparatus, becomes  $0.06 \text{ ((m/s) Pa)}$  or less.